

CASE REPORT

Mesenteric lipoma causing recurrent intestinal obstruction

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Abstract

Although lipoma is a common tumor found in almost all parts of the body, that occurring in the mesentery of the gut is a rarity. A 29-year-old man presented in our center with a 10-year history of recurrent central colicky abdominal pain, vomiting, constipation, and central abdominal mass. Exploratory laparotomy revealed a huge smooth yellow mass in the mesentery of the mid ileum. Resection of the affected segment of the ileum and end to end ileal anastomosis were carried out. Histology report confirmed lipoma. He had uneventful post-operative recovery. Mesenteric lipoma should be considered as a possible differential diagnosis in a patient with recurrent features of intestinal obstruction and a mobile abdominal mass. A high index of suspicion and improvement on the pre-operative diagnosis and treatment are needed in secondary health facilities in Africa.

Key words: Intestinal obstruction, lipoma, mesentery**Date of Acceptance:** 12-Jan-2013

Introduction

A lipoma is a slow growing tumor composed of fat cells of the adult type. Lipomata are very common tumors that are found in almost all parts of the body. They are also found in most body planes.^[1] However, lipomata occurring in the mesentery of the small intestine and transverse colon, referred to as mesenteric lipomata, are generally reported in literature as rare.^[2,5] Mesenteric lipoma is usually asymptomatic as it usually allows the passage of intestinal contents.^[2,7]

Mesenteric lipoma may cause abdominal pain by complete intestinal obstruction due to torsion or volvulus or partial intestinal obstruction associated with compression of the gut.^[7]

There is presently no report by an African author.

The purpose of this report therefore is to highlight the mode of presentation and diagnosis of mesenteric lipoma in an

African setting where facilities for pre-operative diagnosis are not frequently existent.

Case Report

A 29-year-old man presented in our center with a 10-year history of recurrent central colicky abdominal pain, vomiting, constipation, and central abdominal mass. Vomitus consisted initially of recently ingested food and later became bilious. The patient's last bowel motion was 3 days prior to admission. He was not a known diabetic and had not sustained any abdominal trauma previously. There was no history of exposure to radiation and no positive family history of similar illness. Previous episodes of abdominal pain had been treated conservatively by patent medicine dealers and other primary health care providers. The patient was admitted by a general practitioner a few days earlier with the above symptoms before referral to the surgeon.

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The patient received intravenous fluids, intramuscular analgesic (pentazocine), and restriction of oral intake from the referring physician. A review of the other systems did not yield any other significant information.

Examination showed a comfortable patient in good general condition. Vital signs were normal and patient was not dehydrated. He was 170 cm in height and weighed 68 kg. His body mass index was 24 kg/m.^[2] The significant findings in the abdomen were central abdominal fullness, an easily palpable, mobile central abdominal mass measuring about 15 cm in its widest diameter. The mass was more mobile in the vertical plane and was not tender but one could get above and below it.

A working diagnosis of resolved intestinal obstruction secondary to an intra-abdominal mass was made. Patient was sent for abdominal ultrasound scan which described the abdominal mass as an echogenic central abdominal mass but did not give any other useful detail. CT scan was not done because it was not available. The patient was prepared for exploratory laparotomy which was done after 5 days of admission. Findings at surgery included a huge smooth round yellow mass (15 cm in diameter) seen in the mesentery of the mid ileum with normal bowel lying over it. There were no features of acute intestinal obstruction [Figure 1].

The affected segment of the bowel with the tumor was resected and end-to-end ileo-ileal anastomosis was done. Patient made uneventful recovery from surgery. Histology report showed aggregation of normal fat cells thereby confirming mesenteric lipoma.

Discussion

Primary mesenteric tumors are rare.^[2,4] Benign ones (such as mesenteric dermoid and fibroma) are commoner than malignant tumors (desmoid tumor and liposarcoma).^[6] Up to 2009, less than 30 cases of mesenteric lipoma were documented in English literature.^[7] This shows the rarity of this clinical entity. To the best of our knowledge, this is the first report of mesenteric lipoma from Africa.

All the cases published up to this time occurred in the small intestine, mostly the ileum. This is consistent with the observation in this report.

Mesenteric lipoma is commoner in adults aged between 40 and 60 years and rarely occurs in children less than 10 years.^[2] Factors that predispose to lipoma, including mesenteric lipoma, are obesity, diabetes mellitus, hypercholesterolemia, familial tendency, trauma, radiation therapy, and chromosomal translocation.^[2,7] Mesenteric lipoma is usually asymptomatic.^[2,7] Symptoms occasionally arise from volvulus of the segment of gut bearing the lipoma causing acute intestinal

obstruction. Small bowel volvulus without a precipitating cause is rare in adults.^[8] Spontaneous detorsion could occur with relief of obstructive symptoms. This presentation could be recurrent.^[9] The clinical presentation of our patient was suggestive of recurrent volvulus with spontaneous detorsion. Occlusion of the adjacent bowel loop by the lipoma through compression occurs much less commonly. This would be expected to present persistent and progressive features of intestinal obstruction. Less common isolated symptoms include anorexia, abdominal distension, and abdominal pain.^[3,7] Pre-op diagnosis may be built on a high index of suspicion but best definitive diagnostic procedure is computerized tomography scan.^[2,7,10,11]

MRI is also said to be useful in diagnosis.^[12] Ultrasound shows a well-defined homogenous echogenic mass and so can distinguish it from a mesenteric cyst.^[6,10] Though abdominal ultrasound scan combined with clinical features can suggest mesenteric lipoma, it is not specific enough to distinguish it from other echogenic tumors like liposarcoma, enlarged lymph nodes or exophytic tumors of the bowel. It is also observer dependent. Signer *et al.* suggested upper gastro-intestinal series with small bowel follow through and a mesenteric arteriogram as a means of aiding diagnosis^[13] but this is invasive.

Differential diagnoses would include other mesenteric tumors like dermoid cyst, liposarcoma, fibro fatty mesenteric proliferation, ovarian tumor, lymphangioma, lymphangiolipoma, lipoblastoma, lymphoma, neuroblastoma, and cavitating lymph node syndrome.^[2,3,10]

Treatment involves surgical excision of the lipoma with resection of the adjacent small bowel and end-to-end anastomosis.^[3,13] However, enucleation of tumor from the leaves of mesentery has been done.^[14] Laparoscopic excision of mesenteric lipoma has also been reported.^[2,7] There is a chance of malignant transformation as occurs in lipomata in other locations.^[13]

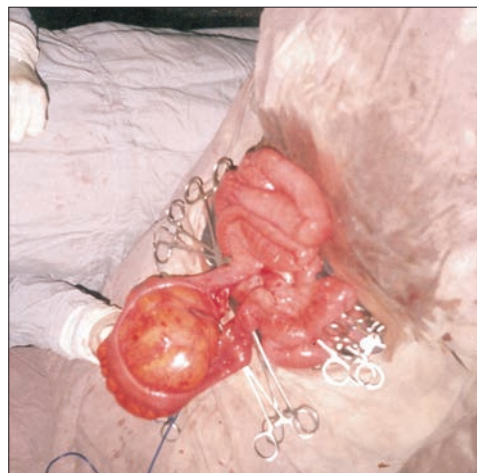


Figure 1: 15 cm lipoma at the mesentery of the mid ileum

Conclusion

Mesenteric lipoma is rare. It should be considered in the differential diagnosis of cases of recurrent intestinal obstruction when associated with mobile abdominal mass. Pre-operative diagnosis and prompt treatment are now possible but is limited in primary and secondary health facilities in Africa by the shortage of skilled personnel and equipment. A high index of suspicion is therefore required in such resource limited settings.

References

1. John PN. Tumours, cysts, ulcers. In: Russel RC, William NS, Bulstrode CJ. (editors) Bailey and Love's Short Practice of Surgery 23rd ed. London; 2000. p. 150-1.
2. Kisra M, Ettayebi F, ElAzzouzi D, Benhammou M. Image of the Month-Mesenteric Lipoma. Arch Surg 2006;141:1046.
3. Ilhan H, Tokar B, Isiksoy S, Koku N, Pasaoglu O. Giant Mesenteric Lipoma. J Pediatric Surg 1999;34:639-40.
4. Ozel SK, Apak S, Ozercan IH, Kazez A. Giant Mesenteric Lipoma as a rare cause of ileus in a child: Report of a case. Surg Today 2004;34:470-2.
5. Sato M, Ishida H, Konno K, Komatsuda T, Naganuma H, Segawa I. Mesenteric lipoma: Report of a case with emphasis on US findings. Eur Radiol 2002;12:793-5.
6. Sherer DM, Lysikiewicz A, Chambers JT, Frager D, Eliakim R, Miodovnik M. Large mesenteric lipoma ultrasonographically mimicking a mature cystic teratoma during pregnancy. J Ultrasound Med 2002;21:473-6.
7. Cha JM, Lee JI, Joo KR, Jung SW, Shin HP, Kim HC, et al. Giant mesenteric lipoma as an unusual cause of abdominal pain: A case report and a review of the literature. J Korean Med Sci 2009;24:333-6.
8. McCoubrey AS, Thompson RL. Small bowel volvulus secondary to amesenteric lipoma: A case report and review of literature. Ir J Med Sci 2006;175:79-80.
9. Takagi Y, Yasuda K, Nakada T, Abe T, Sagi S. Small bowel volvulus caused by a lipoma of the mesentery showing a distinct pattern on pre-operative computed tomography. Dis Colon Rectum 1998;41:122-3.
10. Wolko JD, Rosenfeld DL, Lazar MJ, Underberg-Davis SJ. Torsion of a giant mesenteric lipoma. Pediatr Radiol 2003;33:34-6.
11. Sheen AJ, Drake I, George PP. A small bowel volvulus caused by a mesenteric lipoma: Report of a case. Surg Today 2003;33:617-9.
12. Srinivasan KG, Gaikwad A, Ritesh K, Ushanandini KP. Giant omental and mesenteric lipoma in an infant. Afr J Paediatr Surg 2009;6:68-9.
13. Signer RD, Bregman D, Klausner S. Giant lipoma of the mesentery: Report of an unusual case and review of the literature. Am Surg 1976;42:595-7.
14. Kaniklides C, Frykberg T, Lundkvist K. Pediatric mesenteric lipoma: An unusual cause of repeated abdominal pain. A case report. Acta Radiol 1998;39:695-7.

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ERRATUM

Niger J Clin Pract 2013;16:269-72.

Title: Urinary free cortisol in the diagnosis of Cushing's syndrome: How useful?

Page 269; Column 2; Authors:

Ifedayo AO should be read as IA Odeniyi

Olufemi AF should be read as OA Fasanmade

The error is regretted

- Chief Editor, NJCP